# New species of *Syringophilidae* from African birds (*Acari: Prostigmata*)

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ABSTRACT. Aulobia puylaerti, an African member of the family Syringophilidae is described from Senegal Parrot, Poicephalus senegalus versteri (Psittacidae: Psittaciformes).

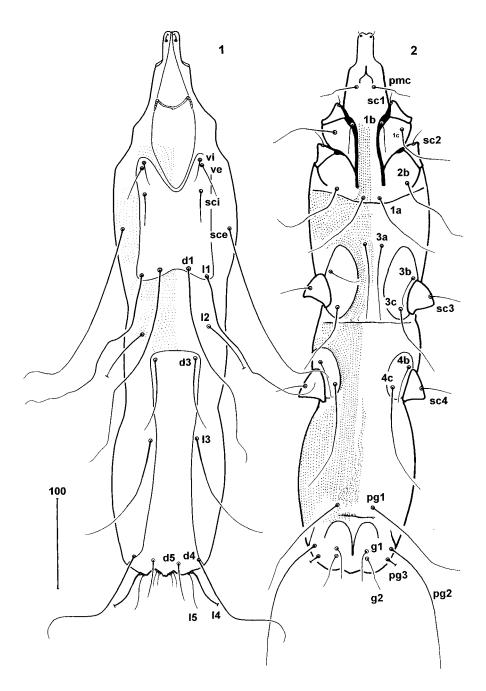
Key words: Acarology, taxonomy, new species, Syringophilidae, birds, Africa.

In the present paper we describe one new species of the hitherto monotypic genus *Aulobia* Kethley, 1970. The morphological terminology and setal designations follow Kethley 1970. All measurements are given in micrometers. Material for the description has originated from the collections Royal Museum of the Central Africa, Tervuren, Belgium. Abbreviations used: MRAC - Royal Museum of the Central Africa, UAM - Department of Animal Morphology, A. Mickiewicz University.

## Aulobia puylaerti sp. n.

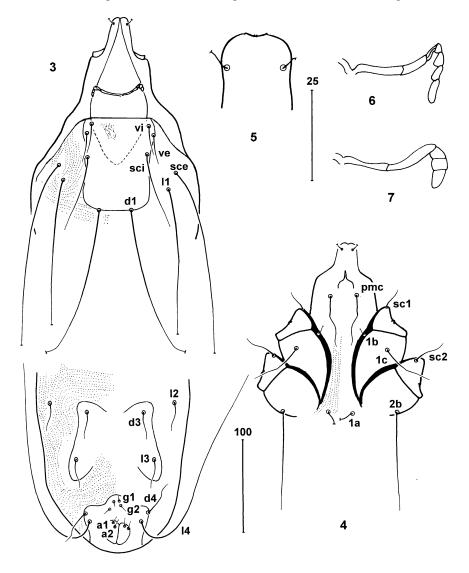
#### DESCRIPTION

Female (Figs 1, 2): Total length of holotype 644 (paratypes 600-680); propodosoma width 128 (120-144). Hypostomal apex with one pair of very small protuberances, (Fig. 5). Lateral hypostomal teeth absent. Chelicerae edentate. Palpal tibiotarsus rounded on distal margin. Stylophore 188 (160-196), constricted on posterior margin, not extending below propodosomal plate. Peritreme M-shaped, each lateral branch with 2-3 chambers, each longitudinal branch with



1-2. Aulobia puylaerti sp. n., female: 1 - dorsal view, 2 - ventral view

4 chambers, (Fig. 6). Propodosomal plate deeply concave on anterior margin, weakly ornamented between setae ve and sci. Setal pattern of propodosomal region with six pairs of setae arranged 2-1-1-2. Setae vi, ve, sci, 11, d1 on the propodosomal plate. Hysterosomal plate present. Setae d3, d4, d5, 14 and 15 on the hysterosomal plate. Genital and anal series with two pairs of setae. Paragenital series with three pairs of setae. MCA1 parallel, fused to MCA2. Legs with full



3-7. *Aulobia puylaerti* sp. n. male: 3 - dorsal view, 4 - ventral view of propodosoma, 5 - hypostomal lips of female, 6 - peritreme of female, 7 - peritreme of male

complement of setae. Setae a' and a'' multiserrate. Claws twice shorter than empodium. Cuticular striations as in Figs. 1, 2. Lengths of setae: vi 30 (25-30), ve 40 (32-40), sci 40 (38-50), sce 238 (224-246), ll 266 (232-260), l2 (52-75), l3 176 (112-220), l4 (400-420), l5 50 (32-47), dl 270 (240-276), d3 70 (68-93), d4 171 (162-197), d5 45 (35-48), pgl (148-172), pg2 (110-140), pg3 (170-203), al and a2 subequal l2 (12-16), gl and g2 subequal 30 (30-33), ratios vi:ve:sci:sce, l:1,3;1,6:9; scl 27, sc2 33, sc3 56 (55-65), sc4 48 (46-50), pmc (56-57), la (139), lc (89-108), 2b (151), 3a 105 (103-120), 3b (57), 3c (132), 4b (45), 4c 128 (130-138).

Male (Figs 3, 4): Length 338-460; propodosoma width 140-160. Hypostomal apex with one pair of very small protuberances. Lateral hypostomal teeth absent. Chelicerae edentate. Palpal tibiotarsus rounded on distal margin. Stylophore 160-172, constricted on posterior margin, extending below propodosomal plate. Peritreme M-shaped, each lateral branch with 2-3 chambers, each longitudinal branch with 3-4 chambers (Fig. 7). Propodosomal plate entire, lateral margins slightly concave. Setal pattern of propodosomal region with six pairs of setae arranged 2-1-2-1. Setae vi, ve, sci, d1 on the propodosomal plate. Hysterosomal plate divided, bearing setae d3 and 13. Pygidial plate present, bearing setae 14, d4, a1, a2, g1 and g2. Paragenital series with two pairs of setae, pg1 absent. MCA1 divergent, not fused to MCA2. Legs with full complement of setae. Setae a' and a" multiserrate. Claws twice shorter than empodium. Cuticular striations as in Fig. 3. Lengths of setae: vi 20-30, ve 40-55, sci 30-50, sce 162-170, 11 152-168, 12 28-38, 13 25-31, 14 170-210, d1 160-190, d3 22-30, d4 25-31, pg2 113-130, pg3 75-120, a1 and a2 subequal 10-12, g1 and g2 subequal 8-10, sc1 24, sc2 28, sc3 82, sc4 58, pmc 57-74, 1a 101, 1b 90-92, 1c 102, 3a 113.

#### **ETYMOLOGY**

This species is dedicated to Dr F. Puylaert, the former curator of the Royal Museum of the Central Africa who made the syringophilid material from the Museum available for our studies.

### DIFFERENTIAL DIAGNOSIS

A. puylaerti sp. n. can be distinguished from the other species, A. dendroicus (Clark, 1964) by following features (females):

A. puylaerti sp. n.

- 1. MCA1 fused to MCA2.
- 2. Propodosomal plate deeply concave on anterior margin.
- 3. Each longitudinal branch of peritreme with 4 chambers.

A. dendroicus (Clark, 1964)

- 1. MCA1 not fused to MCA2
- 2. Propodosomal plate slightly concave on anterior margin.
- 3. Each longitudinal branch of peritreme with 11 chambers.

Type material

From Senegal Parrot, Poicephalus senegalus versteri (Psittacidae: Psittaciformes).

1 female (holotype), 79 females (paratypes), 11 males (paratypes) and 9 nymphae, Togo: Namound joga, 29 July 1969, leg. F. Puylaert (145.442). Types deposited: Holotype, paratypes at MRAC, paratypes at UAM.

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